

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 29 June 2001 (29.06.01)	
International application No. PCT/EP00/09755	Applicant's or agent's file reference I0125-PCT
International filing date (day/month/year) 04 October 2000 (04.10.00)	Priority date (day/month/year) 08 October 1999 (08.10.99)
Applicant AZZOLA, Lucio et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
24 April 2001 (24.04.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Pascal Piriou Telephone No.: (41-22) 338.83.38
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TENT COOPERATION TRE, Y

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

GIAVARINI, Francesco
ABB Ricerca S.p.A.
Viale Edison, 50
I-20099 Sesto San Giovanni
ITALIE

Date of mailing (day/month/year) 08 April 2002 (08.04.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference I0125-PCT	
International application No. PCT/EP00/09755	International filing date (day/month/year) 04 October 2000 (04.10.00)

1. The following indications appeared on record concerning:

☒ the applicant

 ☐ the inventor

 ☐ the agent

 ☐ the common representative

Name and Address ABB RICERCA S.r.l. Via Arconati, 1 I-20135 Milano Italy	State of Nationality IT	State of Residence IT
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person

 ☐ the name

 ☐ the address

 ☐ the nationality

 ☐ the residence

Name and Address ABB SERVICE S.r.l. Via Arconati, 1 I-20135 Milano Italy	State of Nationality IT	State of Residence IT
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

3. Further observations, if necessary:

correction of form IB306 sent on 14 January 2002

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Anne BEUCHAT Telephone No.: (41-22) 338.83.38
---	--

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

To:

GIAVARINI, Francesco
ABB Ricerca S.p.A.
Viale Edison, 50
I-20099 Sesto San Giovanni
ITALIE

Date of mailing (day/month/year) 14 January 2002 (14.01.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference I0125-PCT	
International application No. PCT/EP00/09755	International filing date (day/month/year) 04 October 2000 (04.10.00)

1. The following indications appeared on record concerning:		
<input checked="" type="checkbox"/> the applicant	<input type="checkbox"/> the inventor	<input type="checkbox"/> the agent <input type="checkbox"/> the common representative
Name and Address ABB RICERCA S.P.A. Viale Edison, 50 I-20099 Sesto San Giovanni Italy	State of Nationality IT	State of Residence IT
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
<input checked="" type="checkbox"/> the person	<input type="checkbox"/> the name	<input type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence
Name and Address ABB RICERCA S.r.l. Via Arconati, 1 I-20135 Milano Italy	State of Nationality IT	State of Residence IT
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to:		
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned	
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned	
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer R. Raissi
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

6

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) 10125-PCT

Box No. I TITLE OF INVENTION

ELECTRIC POLE FOR LOW-VOLTAGE POWER CIRCUIT BREAKER

Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

ABB RICERCA SpA
VIALE EDISON, 50
I-20099 SESTO SAN GIOVANNI (MI)
IT

☐ This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:

IT

State (that is, country) of residence:

ITALY

This person is applicant for the purposes of:

☐ all designated States

☒ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

AZZOLA LUCIO
VIA G. D'ALZANO, 8
I-24122 BERGAMO
IT

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

IT

State (that is, country) of residence:

ITALY

This person is applicant for the purposes of:

☐ all designated States

☐ all designated States except the United States of America

☒ the United States of America only

☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

GIAVARINI FRANCESCO
ABB RICERCA SpA
VIALE EDISON, 50
I-20099 SESTO SAN GIOVANNI (MI)
IT

Telephone No.

+39 02 26232182

Facsimile No.

+39 02 26232188

Teleprinter No.

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

ZANCHI ELIGIO
VIA GRUMELLO, 24
I-24022 ALZANO LOMBARDO (BG)
IT

This person is:

- ☐ applicant only
☒ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:
IT

State (that is, country) of residence:
ITALY

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

Box No.V DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

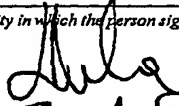
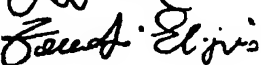
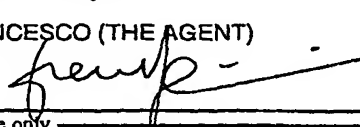
Regional Patent

- ☒ **AP ARIPO Patent:** GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☒ **EA Eurasian Patent:** AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ **EP European Patent:** AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ **OA OAPI Patent:** BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

- | | |
|--|--|
| <input type="checkbox"/> AE United Arab Emirates | <input type="checkbox"/> LC Saint Lucia |
| <input type="checkbox"/> AG Antigua and Barbuda | <input type="checkbox"/> LK Sri Lanka |
| <input checked="" type="checkbox"/> AL Albania | <input type="checkbox"/> LR Liberia |
| <input type="checkbox"/> AM Armenia | <input type="checkbox"/> LS Lesotho |
| <input type="checkbox"/> AT Austria | <input type="checkbox"/> LT Lithuania |
| <input checked="" type="checkbox"/> AU Australia | <input type="checkbox"/> LU Luxembourg |
| <input type="checkbox"/> AZ Azerbaijan | <input type="checkbox"/> LV Latvia |
| <input checked="" type="checkbox"/> BA Bosnia and Herzegovina | <input type="checkbox"/> MA Morocco |
| <input type="checkbox"/> BB Barbados | <input type="checkbox"/> MD Republic of Moldova |
| <input checked="" type="checkbox"/> BG Bulgaria | <input type="checkbox"/> MG Madagascar |
| <input checked="" type="checkbox"/> BR Brazil | <input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia |
| <input type="checkbox"/> BY Belarus | <input type="checkbox"/> MN Mongolia |
| <input type="checkbox"/> BZ Belize | <input type="checkbox"/> MW Malawi |
| <input checked="" type="checkbox"/> CA Canada | <input checked="" type="checkbox"/> MX Mexico |
| <input type="checkbox"/> CH and LI Switzerland and Liechtenstein | <input type="checkbox"/> MZ Mozambique |
| <input checked="" type="checkbox"/> CN China | <input checked="" type="checkbox"/> NO Norway |
| <input type="checkbox"/> CR Costa Rica | <input type="checkbox"/> NZ New Zealand |
| <input type="checkbox"/> CU Cuba | <input checked="" type="checkbox"/> PL Poland |
| <input checked="" type="checkbox"/> CZ Czech Republic | <input type="checkbox"/> PT Portugal |
| <input type="checkbox"/> DE Germany | <input checked="" type="checkbox"/> RO Romania |
| <input type="checkbox"/> DK Denmark | <input checked="" type="checkbox"/> RU Russian Federation |
| <input type="checkbox"/> DM Dominica | <input type="checkbox"/> SD Sudan |
| <input type="checkbox"/> DZ Algeria | <input type="checkbox"/> SE Sweden |
| <input type="checkbox"/> EE Estonia | <input checked="" type="checkbox"/> SG Singapore |
| <input type="checkbox"/> ES Spain | <input checked="" type="checkbox"/> SI Slovenia |
| <input type="checkbox"/> FI Finland | <input checked="" type="checkbox"/> SK Slovakia |
| <input type="checkbox"/> GB United Kingdom | <input type="checkbox"/> SL Sierra Leone |
| <input type="checkbox"/> GD Grenada | <input type="checkbox"/> TJ Tajikistan |
| <input type="checkbox"/> GE Georgia | <input type="checkbox"/> TM Turkmenistan |
| <input type="checkbox"/> GH Ghana | <input checked="" type="checkbox"/> TR Turkey |
| <input type="checkbox"/> GM Gambia | <input type="checkbox"/> TT Trinidad and Tobago |
| <input checked="" type="checkbox"/> HR Croatia | <input type="checkbox"/> TZ United Republic of Tanzania |
| <input checked="" type="checkbox"/> HU Hungary | <input checked="" type="checkbox"/> UA Ukraine |
| <input type="checkbox"/> ID Indonesia | <input type="checkbox"/> UG Uganda |
| <input checked="" type="checkbox"/> IL Israel | <input checked="" type="checkbox"/> US United States of America |
| <input checked="" type="checkbox"/> IN India | <input type="checkbox"/> UZ Uzbekistan |
| <input type="checkbox"/> IS Iceland | <input type="checkbox"/> VN Viet Nam |
| <input checked="" type="checkbox"/> JP Japan | <input checked="" type="checkbox"/> YU Yugoslavia |
| <input type="checkbox"/> KE Kenya | <input type="checkbox"/> ZA South Africa |
| <input type="checkbox"/> KG Kyrgyzstan | <input type="checkbox"/> ZW Zimbabwe |
| <input checked="" type="checkbox"/> KP Democratic People's Republic of Korea | Check-box reserved for designating States which have become party to the PCT after issuance of this sheet: |
| <input checked="" type="checkbox"/> KR Republic of Korea | <input type="checkbox"/> |
| <input type="checkbox"/> KZ Kazakhstan | |

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM					<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:			
		national application: country	regional application: regional Office	international application: receiving Office	
item (1) 8 October 1999 (08.10.99)	MI99A002114	IT			
item (2)					
item (3)					
<input type="checkbox"/> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s). <i>* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.</i>					
Box No. VII INTERNATIONAL SEARCHING AUTHORITY					
Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used): ISA /		Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority): Date (day/month/year) Number Country (or regional Office)			
Box No. VIII CHECK LIST; LANGUAGE OF FILING					
This international application contains the following number of sheets: request : 4 description (excluding sequence listing part) : 8 claims : 2 abstract : 1 drawings : 4 sequence listing part of description : / Total number of sheets : 19		This international application is accompanied by the item(s) marked below: 1. <input checked="" type="checkbox"/> fee calculation sheet 2. <input type="checkbox"/> separate signed power of attorney 3. <input checked="" type="checkbox"/> copy of general power of attorney; reference number, if any: 40447 4. <input type="checkbox"/> statement explaining lack of signature 5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 6. <input type="checkbox"/> translation of international application into (language): 7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material 8. <input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form 9. <input type="checkbox"/> other (specify):			
Figure of the drawings which should accompany the abstract: 1		Language of filing of the international application: ENGLISH			
Box No. IX SIGNATURE OF APPLICANT OR AGENT					
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request). AZZOLA LUCIO (INVENTOR AND APPLICANT)  ZANCHI ELIGIO (INVENTOR AND APPLICANT)  GIAVARINI FRANCESCO (THE AGENT) 					
For receiving Office use only					
1. Date of actual receipt of the purported international application:		2. Drawings:			
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		<input type="checkbox"/> received:			
4. Date of timely receipt of the required corrections under PCT Article 11(2):		<input type="checkbox"/> not received:			
5. International Searching Authority (if two or more are competent): ISA /		6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.			
For International Bureau use only					
Date of receipt of the record copy by the International Bureau:					

PATENT COOPERATION TREATY

⑦

From the RECEIVING OFFICE

PCT

To:

Giovarini, Francesco
ABB RICERCA SPA
Viale Edison, 50
I-20099 Sesto San Giovanni (MI)
ITALIE

NOTIFICATION OF THE INTERNATIONAL APPLICATION NUMBER AND OF THE INTERNATIONAL FILING DATE

(PCT Rule 20.5(c))

Date of mailing (day/month/year) 08 NOV 2000	
Applicant's or agent's file reference I 0125-PCT	IMPORTANT NOTIFICATION
International application No. PCT/EP 00/ 09755	International filing date (day/month/year) 04/10/2000
Priority date (day/month/year) 08/10/1999	
Applicant ABB RICERCA SPA	
Title of the invention	

1. The applicant is hereby notified that the international application has been accorded the international application number and the international filing date indicated above.
2. The applicant is further notified that the record copy of the international application was transmitted to the International Bureau on the above date of mailing.
3. ☐ Other:

* The International Bureau monitors the transmittal of the record copy by the receiving Office and will notify the applicant (with Form PCT/IB/301) of its receipt. Should the record copy not have been received by the expiration of 14 months from the priority date, the International Bureau will notify the applicant (Rule 22.1(c)).

Name and mailing address of the receiving Office European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer <div style="text-align: right; margin-top: 20px;"> R. BEYTORUN </div>
---	--

off 10/11

PATENT COOPERATION TREATY

8

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

GIAVARINI, Francesco
ABB Ricerca S.p.A.
Viale Edison, 50
I-20099 Sesto San Giovanni
ITALIE

Date of mailing (day/month/year) 13 February 2001 (13.02.01)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference I0125-PCT	
International application No. PCT/EP00/09755	
International publication date (day/month/year) Not yet published	
Applicant ABB RICERCA S.P.A. et al	International filing date (day/month/year) 04 October 2000 (04.10.00) Priority date (day/month/year) 08 October 1999 (08.10.99)

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, **the attention of the applicant is directed to Rule 17.1(c)** which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, **the attention of the applicant is directed to Rule 17.1(c)** which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
08 Octo 1999 (08.10.99)	MI99A002114	IT	05 Febr 2001 (05.02.01)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer

R. Raissi

Telephone No. (41-22) 338.83.38

To:

ABB RICERCA SPA
Attn. GIAVARINI, Francesco
Viale Edison, 50
I-20099 Sesto San Giovanni (MI)
ITALY

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing (day/month/year) 02/02/2001	
Applicant's or agent's file reference I0125-PCT	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/EP 00/ 09755	International filing date (day/month/year) 04/10/2000
Applicant ABB RICERCA SPA et al.	

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within **20 months** from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Begoña Abad Mesa

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

GIAVARINI, Francesco
ABB RICERCA SPA
Viale Edison, 50
I-20099 Sesto San Giovanni (MI)
ITALIE

NOTIFICATION OF RECEIPT
OF DEMAND BY COMPETENT INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY

(PCT Rules 59.3(e) and 61.1(b), first sentence
and Administrative Instructions, Section 601(a))

Date of mailing
(day/month/year)

1 7.05. 01

Applicant's or agent's file reference
I0125-PCT

IMPORTANT NOTIFICATION

International application No.

PCT/EP 00/ 09755

International filing date (day/month/year)

04/10/2000

Priority date (day/month/year)

08/10/1999

Applicant

ABB RICERCA SPA et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

24/04/2001

2. This date of receipt is:

- ☒ the actual date of receipt of the demand by this Authority (Rule 61.1(b)).
☐ the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).
☐ the date on which this Authority has, in response to the invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

3. ☐ **ATTENTION:** That date of receipt is **AFTER** the expiration of 19 months from the priority date. Consequently, the election(s) made in the demand does (do) not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)). Therefore, the acts for entry into the national phase must be performed within 20 months from the priority date (or later in some Offices) (Article 22). For details, see the *PCT Applicant's Guide*, Volume II.

- ☐ (If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

4. Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/



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Authorized officer

DUPONT-HUEPER M

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9215

PATENT COOPERATION TREATY

(12)

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

GIAVARINI, Francesco
ABB RICERCA SPA
Viale Edison, 50
I-20099 Sesto San Giovanni (MI)
ITALIE

PCT

WRITTEN OPINION

(PCT Rule 66)

<p>Date of mailing (day/month/year) 17.10.2001</p>		
<p>Applicant's or agent's file reference I0125-PCT</p>	<p>REPLY DUE within 2 month(s) from the above date of mailing</p>	
<p>International application No. PCT/EP00/09755</p>	<p>International filing date (day/month/year) 04/10/2000</p>	<p>Priority date (day/month/year) 08/10/1999</p>
<p>International Patent Classification (IPC) or both national classification and IPC H01H1/58</p>		
<p>Applicant ABB RICERCA SPA et al.</p>		

1. This written opinion is the first drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain document cited
 - VII ☒ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: **08/02/2002**.

<p>Name and mailing address of the international preliminary examining authority:</p> <div style="display: flex; align-items: center;"> <div> <p>European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465</p> </div> </div>	<p>Authorized officer / Examiner</p> <p>Simonini, S</p> <hr/> <p>Formalities officer (incl. extension of time limits)</p> <p>Siedsma, Y Telephone No. +49 89 2399 7242</p>
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I. Basis of the opinion

1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"):

Description, pages:

1-8 as originally filed

Claims, No.:

1-8 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

WRITTEN OPINION

International application No. PCT/EP00/09755

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Claims 1,3,8

Inventive step (IS) Claims 2,4-7

Industrial applicability (IA) Claims

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following document:

D2: EP 0 219 449 A (SIEMENS AG) 22 April 1987 (1987-04-22)

2 **Claim 1** is objected to under Article 33(2) PCT -Novelty- because all of its features are known from document D2, which discloses:
an electric pole (fig.1) comprising: --a fixed contact (26) and a movable contact (16) which can be mutually *coupled/uncoupled*; two conducting elements (13 and the one not visible in fig.1, as explained at column 3 lines 19-23), suitable to electrically connect said movable contact to a power supply grid, said conducting elements being arranged so that the electric currents flowing through them are equally orientated; and --means for mechanically supporting (22) and actuating (24) said movable contact; comprising one insulating element (31) which is interposed between said conducting elements (see figs.1 and 3).

Note that the features following terms like "suitable to" are not considered as limiting the scope of the claim (see the Guidelines, Section IV III-4.8).

3 Dependent **claims 2 to 7** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step, the reasons being as follows:

3.1 The feature of claim 3 is known from document D2, fig.1 (Art.33(2) PCT).

3.2 The features of claims 5 and 7 are known from document D2, fig.1 (Art.33(3) PCT).

3.3 The features of claims 2, 4, 6 are mere constructive options that can be chosen by the person skilled in the art without the exercise of inventive step (Art.33(3) PCT).

4 **Claim 8** relates to a low-voltage power circuit breaker comprising an electric pole

according to claim 1. Such a device is known from document D2 (Art.33(2) PCT).

Re Item VII

Certain defects in the international application

- 1 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- 2 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D2 is not mentioned in the description, nor is this document identified therein.

PATENT COOPERATION TREATY

PCT

42
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference I0125-PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP00/09755	International filing date (day/month/year) 04/10/2000	Priority date (day/month/year) 08/10/1999
International Patent Classification (IPC) or national classification and IPC H01H1/58		
Applicant (ABB RICERCA SPA et al.) ABB RICERCA S.r.l.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 4 sheets, including this cover sheet.

- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 24/04/2001	Date of completion of this report 27.12.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Simonini, S Telephone No. +49 89 2399 8575 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP00/09755

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

2,3,5-8	as originally filed			
1,4	as received on	10/12/2001	with letter of	06/12/2001

Claims, No.:

1-8	as received on	10/12/2001	with letter of	06/12/2001
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Drawings, sheets:

1/4-4/4	as originally filed
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2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP00/09755

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-8
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-8
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-8
	No:	Claims	

2. Citations and explanations
see separate sheet

R I t m V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following document:

D2: EP 0 219 449 A (SIEMENS AG) 22 April 1987 (1987-04-22)

- 2 Document D2 is considered closest state of the art to the subject matter of **claim 1**. Claim 1 differs therefrom in that an insulating element contrasts by friction the movements of the two conducting elements, thus limiting the end-stroke velocity educing the risk of rebounds and subsequent reclosure of the contact. This solution is not suggested by any of the available prior art.
- 3 **Claims 2 to 7** are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 4 **Claim 8** refers to a circuit breaker comprising the inventive pole according to claim 1, and thus also meets the requirements of the PCT with respect to novelty and inventive step.



10/089607

13

JC01 Rec'd PCT/PTO 01 APR 2002

Sesto San Giovanni, 06.12.01

EUROPEAN PATENT OFFICE
International Preliminary Examination Authority

D-80298 Munich

Via facsimileConfirmation by special courier

Re.: International Patent Application No. PCT/EP00/09755;
"Electric pole for low-voltage power circuit breaker";
filed on 04/10/2000;
in the name of ABB RICERCA S.p.A et al.
Our Ref.: I-0125-PCT.

Dear Sirs:

This is in response to the PCT written opinion pursuant to PCT Rule 66, dated 17.10.01,
concerning the above-referenced International Patent Application.

In order to overcome the Examiner's observation under Item V, claim 1 has been amended so
as to better characterize the invention.

In accordance with Article 34(2) PCT, no new matter has been introduced; in particular, new
claim 1 has been amended by better defining the function performed by the insulating element
(13). Support for this amendment can be found in the description, e. g. at page 5 line 26-page
6 line 1.

ABB Service Srl

ABB Ricerca - Corporate Research Center

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C.C.I.A.A. Milano n.: 1263494
Reg. Imp. di Milano n. C.F. iscrizione e P. IVA: 09014870159

ABB Service S.r.l.

With respect to the reasoned statement under Rule 66.2(a)(ii), we would like to point out the following:

Novelty

Claim 1 of the present invention has at least one essential feature which is not disclosed in any of the documents cited.

In particular, document EP 0219449 A (=D2) discloses a contact arrangement for a low voltage circuit breaker having a fixed contact (26) and a movable contact (16) which can mutually couple/uncouple, two conducting elements (13) suitable for connecting the movable contact (16) to a power supply grid, means for mechanically supporting (22) and actuating (24) the movable contact (16), and an insulating spacer (31) having a wall (32) interposed between the two conducting elements (13) (see col. 3 lines 30-36).

Contrary to new claim 1 presently on file, document D2 does not disclose the presence of an insulating element which contrasts, by means of friction with the conducting elements, the electrodynamic repulsion forces generated between the contacts in short-circuit conditions.

As a matter of fact, in accordance with Article 33(2) PCT, the electric pole of the present invention is new.

Inventive step

As regard to the inventive step, the present invention is mainly aimed at providing an electric pole for a low-voltage circuit breaker which allows to stop the movable contact during opening without using blocking devices, and in particular to avoid undesired reclosures of the contacts after opening in short-circuit conditions (see esp. page 3, lines 9-20).

This purpose is achieved by the combination of features of the device as set forth in Claim 1; in fact, the friction between the insulating element (13) and the conducting elements (11) allows to absorb part of the energy possessed by the movable contact during separation from the fixed one, thus limiting the end-stroke velocity of the movable contact itself and definitely reducing the possibility of undesired reclosures (see esp. page 6 lines 9-14, page 7, lines 12-19).

ABB Service S.r.l.

On the contrary, document D2 relates to a contact arrangement in which an insulating element is suitably provided so as to prevent deformation of the conducting elements following mechanical stresses, and limit spreading of the conducting elements' legs (18-19) (see col. 3 lines 30-36; col. 3 line 63-col.4 line 21), i.e. a completely different purpose and teaching with respect to the present invention.

In no way the person skilled in the art would have been motivated to modify the contact arrangement described in document D2 so as to introduce the essential feature of the present invention.

Accordingly the electric pole of the present invention also involves an inventive step.

With reference to the Examiner's observation under Item VII, amended page 4 put in conformity with new claim 1, and amended page 1 taking into account the relevant background art disclosed in document D2 so as to satisfy the requirements of rule 5.1 (a)(ii) PCT are hereby filed in triplicate.

Finally, in accordance with Rule 6.2(b) PCT, the features of the claims, hereby attached in triplicate, have been provided with reference signs in parentheses.

With best regards.

The Agent

Francesco Giavarini



Encl.: set of claims 1 to 8 (3X);

amended pages 1 and 4 of the description (3X).

PATENT COOPERATION TREATY

115 117

14

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Rule 71.1)

To:

GIAVARINI, Francesco
ABB RICERCA SPA
Viale Edison, 50
I-20099 Sesto San Giovanni (MI)
ITALIE

Date of mailing
(day/month/year) 27.12.2001

Applicant's or agent's file reference
10125-PCT

IMPORTANT NOTIFICATION

International application No.
PCT/EP00/09755

International filing date (day/month/year)
04/10/2000

Priority date (day/month/year)
08/10/1999

Applicant
ABB RICERCA SPA et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/



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Authorized officer

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